

## **Base Year Ozone SIP Point Source Inventory**

The Ozone SIP requires a base year point source inventory as a building block for the SIP. The base year inventory selected for this evaluation was the 2017 inventory.

As with all inventories collected for this analysis, the pollutants included PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, SO<sub>2</sub>, VOC, CO, NH<sub>3</sub>, and all reported HAPs, and were measured in tons per year. Once the inventory was completed, a pre-processor called SMOKE then converted it to a 24-hour period.

### **Source Selection:**

At the beginning of this ozone SIP, the 2017 triennial inventory was the latest and most current inventory available for point sources, which included all major sources, Title V sources, and any sources included in the PM<sub>10</sub> or ozone maintenance plans. Staff used the definition of a Type B Source under Title V of the Clean Air Act (as specified in 40 CFR Appendix A to Subpart A of Part 51) to define point source thresholds in the nonattainment areas. The provided inventory includes all Type B sources of NO<sub>x</sub> and VOC statewide. Emissions from sources under the Type B thresholds are included in the area source base year inventory, as they do not have large enough potential emissions to qualify for the point source base year inventory.

According to the above definition, Utah had 51 Type B Sources as of 2017 based on each facility's potential to emit in their Approval Orders. Table 1 lists the 51 Type B Sources along with their 2017 actual emissions for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, CO and NH<sub>3</sub>. Note: following EPA comments to the draft of the Moderate SIP, five facilities in the Wasatch Front NAA section of Table 1 should move to the Surrounding Area section. These five facilities are:

- 10706 Dugway Proving Ground
- 10725 Clean Harbors Aragonite LLC
- 10794 McWane Ductile
- 11284 Hill Air Force Base Test and Training Range
- 13031 PacifiCorp Energy Lakeside Power Plant

10706, 10725, and 11284 are in Tooele county, outside the NAA boundary. 10794 and 13031 are in Utah County, which is part of the Southern Wasatch Front NAA.

**Table 1. Ozone Maintenance SIP - 51 Major Point Sources with 2017 Base Year Emissions**

Uinta Basin NAA												
Facility ID	Facility Name	County	CO	NH3	NOX	PM10-FIL	PM10-PRI	PM25-FIL	PM25-PRI	PM-CON	SO2	VOC
10209	Kinder Morgan Altamont LLC- Altamont East Compr	Duchesne	84.65705	0.005748	451.5778	4.145112	6.709304	4.145112	6.709304	2.566192	0.179109	55.89638
10210	Kinder Morgan Altamont LLC- Altamont West Compr	Duchesne	20.6536	0	312.5585	0.685966	1.49748	0.685966	1.49748	0.812185	0.054967	34.66175
10211	Kinder Morgan Altamont LLC: Altamont South Com	Duchesne	64.38153	0	397.1433	3.19922	5.407406	3.19922	5.407406	2.209832	0.153152	41.5952
Wasatch Front NAA												
Facility ID	Facility Name	County	CO	NH3	NOX	PM10-FIL	PM10-PRI	PM25-FIL	PM25-PRI	PM-CON	SO2	VOC
10119	Chevron Products Co - Salt Lake Refinery	Davis	245.9364	7.71248	253.6439	8.24626	39.94036	8.130038	27.83414	19.70447	32.37666	363.8811
10121	Hill Air Force Base- Main Base	Davis	104.8	1.716589	101.4318	8.705349	12.9164	3.544455	7.632749	4.559734	1.584796	140.2439
10122	Big West Oil, LLC- Big West Oil Refinery	Davis	235.1275	6.68676	115.1532	9.43992	25.14479	4.423845	16.43603	12.01218	55.42934	676.5882
10123	Holly Corp- HRMC and HEP Woods Cross Operation	Davis	404.2459	14.14302	170.5097	6.634652	18.16515	6.634652	18.16515	10.69932	44.34995	217.4547
10129	Wasatch Integrated Waste Mgt District- County Lan	Davis	34.98032	0	91.82385	11.32468	12.83692	4.022317	5.500797	1.357955	6.466002	23.71984
10335	Tesoro Refining & Marketing Company LLC - Salt La	Salt Lake	255.0671	3.348712	313.2683	50.65686	160.322	24.99546	99.6618	74.36252	499.4645	230.7685
10346	Kenecott Utah Copper LLC- Smelter & Refinery	Salt Lake	92.02976	4.801592	134.1568	111.2444	692.9853	30.73377	608.3457	528.6973	587.9507	10.82181
10354	University of Utah- University of Utah facilities	Salt Lake	38.01669	2.572328	41.6543	2.979777	10.84801	2.979577	10.84727	7.737495	0.585919	8.125126
10355	Pacificorp Energy- Gadsby Power Plant	Salt Lake	27.08464	4.719398	38.80541	1.351089	8.153358	1.351089	5.021008	3.645546	0.459948	2.256009
10556	Chevron Products Co - SLC Terminal- Salt Lake City I	Davis	0	0	0	0	0	0	0	0	0	13.36
10571	Kenecott Utah Copper LLC: Mine & Copperton Cor	Salt Lake	1357.035	1.779743	4209.185	923.1724	1096.407	105.465	273.7077	3.234568	2.700964	210.027
10572	Kenecott Utah Copper LLC- Power Plant Lab Tailir	Salt Lake	36.1232	1.214843	460.7969	41.83591	72.97261	8.404092	34.80528	23.43846	1036.373	6.589673
10706	Dugway Proving Ground- U.S. Army-Dugway Provin	Tooele	131.9238	0.125309	16.77898	672.914	679.6184	67.49119	72.56966	0.36614	1.050064	12.37601
10716	US Magnesium LLC- Rowley Plant	Tooele	323.0527	1.816429	1061.587	812.9469	824.6903	609.5124	621.8435	3.853014	6.789889	660.2621
10790	Brigham Young University- Main Campus	Utah	25.88067	0.940294	66.92261	0.748015	2.566015	0.748015	2.483281	1.741758	0.342341	5.537799
10794	McWane Ductile - Utah	Utah	12.43853	0.751383	34.42187	10.01309	15.95149	8.104372	12.20648	1.510867	8.659586	26.80407
11386	Hexcel Corporation: Salt Lake Operations	Salt Lake	105.0291	69.3483	189.6789	7.397566	130.6861	5.353119	85.27667	11.76438	33.1437	151.112
12495	Utah Municipal Power Agency: West Valley Power F	Salt Lake	14.37263	0	10.08549	1.332756	4.629573	1.332756	4.629573	3.296817	0.359	1.473046
13031	PacificCorp Energy: Lake Side Power Plant	Utah	917.0715	110.3469	207.055	27.17454	65.07787	27.17409	65.07735	37.90344	7.597574	26.25523
Surrounding Area												
Facility ID	Facility Name	County	CO	NH3	NOX	PM10-FIL	PM10-PRI	PM25-FIL	PM25-PRI	PM-CON	SO2	VOC
10007	Holcim (US) Inc.- Devil's Slide Plant	Morgan	1059.513	3.950257	1426.829	68.8407	72.08774	12.31815	15.53129	2.11708	196.238	45.1107
10008	Nucor Steel- Nucor Steel	Box Elder	688.007	2.24	182.4087	39.90939	45.90351	26.81281	32.4932	6.481988	80.16726	31.48801
10009	ATK Launch Systems - Promontory	Box Elder	36.59261	5.695436	35.83181	16.1094	75.77451	16.06268	53.12056	3.536556	0.791143	29.93045
10028	Vulcraft - Division of Nucor Corporation- Steel Prod	Box Elder	6.382686	0	6.148592	17.16326	17.93586	7.266012	7.902256	0.016271	0.250006	42.92361
10034	Paradox Midstream, LLC- Lisbon Natural Gas Proce	San Juan	0	0	0	0	0	0	0	0	0	0
10096	Sunnyside Cogeneration Associates- Sunnyside Cog	Carbon	42.75709	0.147648	430.7744	58.39228	65.24486	33.02771	39.87427	6.633411	477.8187	25.37806
10107	ECDC Environmental LC: East Carbon Landfill	Carbon	33.49874	0.002083	14.30795	11.18594	13.09131	1.125966	3.014934	0.024225	1.258756	15.82064
10237	PacificCorp- Hunter Power Plant	Emery	3158.088	1.364397	9776.709	372.4152	503.9166	253.777	385.3349	131.6104	3511.607	119.7519
10238	PacificCorp- Huntington Power Plant	Emery	5107.677	0.815324	5934.584	304.5431	474.012	141.1732	218.8117	77.41847	2280.984	74.78454
10259	Northwest Pipeline GP: Cisco Compressor Station	Grand	1.094153	0.00489	2.557464	0.02381	0.080835	0.02381	0.080835	0.057028	0.276104	0.036287
10303	Ash Grove Cement Company- Leamington Cement I	Millard	6278.884	58.76562	1192.02	94.23772	116.9559	78.10069	100.8049	22.98952	19.05285	53.00809
10311	Materion Natural Resources- Delta Mill	Millard	8.85831	82.5024	13.69689	0.545035	22.78497	0.515275	4.44034	0.81845	0.444941	6.21433
10313	Graymont Western US Incorporated- Cricket Moun	Millard	295.7779	25.8246	608.8248	105.146	285.6463	81.62961	144.3676	3.453703	25.1008	14.90395
10327	Intermountain Power Service Corporation- Intermo	Millard	964.5881	1.646874	9333.373	113.9202	983.446	98.20097	923.8997	824.8431	2483.621	107.6679
10627	Northwest Pipeline GP: Moab Compressor Station	San Juan	4.938363	0	34.47672	0.430036	0.598616	0.430036	0.598616	0.168686	0.208669	1.314453
10676	Utelite Corporation: Shale Processing	Summit	9.265163	0.026156	211.4474	32.85941	89.27435	9.961968	37.69215	22.556	137.2218	2.315362
10707	Lhoist North America - Grantsville Plant	Tooele	0.059465	0	0.112698	0	7.57304	0	1.104267	0	0.00016	0.073786
10725	Clean Harbors Aragonite LLC: Hazardous Waste Sto	Tooele	43.52801	0	126.5971	2.130361	3.731553	0.53237	1.780716	0.755158	23.87022	5.866225
10892	St. George City Power: Red Rock Power Generation	Washington	6.009577	0	15.98719	0.965474	3.316283	0.96492	3.315729	2.352639	0.358563	2.84553
11284	Hill Air Force Base- Utah Test and Training Range	Box Elder	5.035744	0.084246	14.17308	157.4693	170.4417	58.24496	62.61981	3.280365	0.830268	3.520349
11532	Questar Pipeline LLC: Kastler Marushack Compress	Daggett	28.0294	2.845406	639.1489	1.802227	4.368936	1.802227	4.368612	2.556177	0.716218	44.79385
11767	Genpak Corporation: Polystyrene Foam Production	Iron	0.458	0.2061	1.0763	0.492075	0.55734	0.492075	0.55734	0.065265	0.00687	71.08133
12512	Kern River Gas Transmission Company- Veyo Comp	Washington	11.46547	0.009243	70.82573	2.019062	7.018841	2.019062	7.01884	4.999778	0.250921	5.510127
12524	PacificCorp Energy: Currant Creek Power Plant	Juab	297.9596	40.90534	157.6778	1.922706	24.2301	1.922617	24.23001	22.30561	2.741621	10.02246
12929	EnerVest Operating - Sage Brush Flat Compressor S	Carbon	3.051788	0	15.27752	0.212951	2.40925	0.212951	2.40925	2.263922	0.136251	20.73716
12948	EnerVest Operating L.L.C.: Dry Canyon Compressor	Carbon	9.790144	0.039875	7.39642	1.203784	2.534381	1.203784	2.534381	1.330342	0.084305	14.33906
13284	EnerVest Operating L.L.C.: Interplanetary Compress	Carbon	7.132489	0	5.130528	1.650268	3.382715	1.650268	3.382715	1.768525	0.108679	13.29836
14010	Energy Fuels Resources (USA) Inc. Tony M. Mine	Garfield	0	0	0	0	0	0	0	0	0	0
14107	Procter and Gamble-Paper Manufacturing Plant	Box Elder	28.1828	1.21317	28.3081	13.3392	40.91018	13.12384	40.69481	27.41128	0.38105	17.30305

## **Data Collection and QA/QC**

UDAQ manages point source emissions inventory data with the online platform State and Local Emissions Inventory System (SLEIS). SLEIS utilizes extensive built-in computing capabilities which standardize calculations. SLEIS also contains extensive QA/QC which guides point sources as they submit their data, greatly reducing oversight required by UDAQ staff. The submitted emissions inventories were thoroughly reviewed using additional QA/QC by UDAQ staff before being finalized. Each facility's submission is reviewed and compared against previous inventories and the corresponding permit to ensure all equipment is captured in the inventory and that calculation methods remain sound and consistent. This QA/QC process greatly surpasses EPA guidance requiring 10% QA/QC as the minimum criteria necessary for a SIP inventory.

